AIPHONE

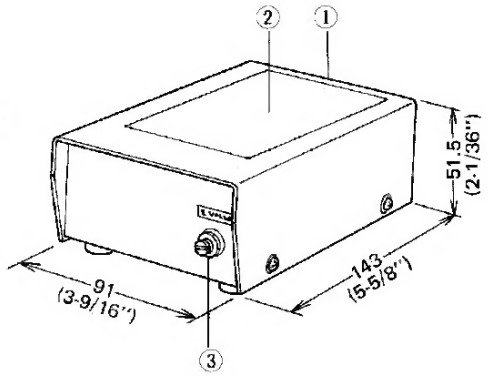
833255 0283©

3-WATT PAGING AMPLIFIER

MODEL : PG-3

AIPHONE PG-3, 3-WATT PAGING AMPLIFIER IS DESIGNED FOR USE WITH AIPHONE INTERCOM SYSTEMS: TB-F, TB-H, TS-K, KAH, LAF, LAH-20 AND HM-7.

— INSTRUCTIONS —

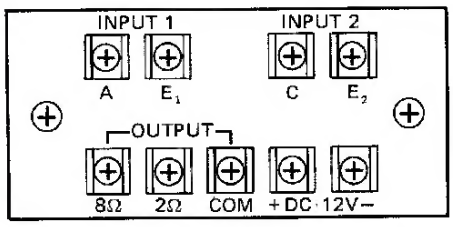


(1) Terminal block
(2) Connecting instruction label
(3) Volume control

SPECIFICATIONS

*	Power output:	3 watts.
*	Distortion:	Less than 1% at 1,000Hz 1 watt output.
*	Current consumption:	750mA at maximum output.
*	Input:	INPUT 1 (Impedance: 10K ohm) . . . 100mV for maximum output. INPUT 2 (Impedance: 20 ohm) . . . 600mV for maximum output.
*	Output:	8 ohm (8 ohm – COM) 2 ohm (2 ohm – COM)
*	Power requirements:	DC-12V. Use Aiphone PS-12A (or PS-12C in North America) power supply.

ACTUAL TERMINAL LOCATIONS



*** INPUT 1: for systems TB-F, TB-H, TS-K & KAH.**
*** INPUT 2: for systems LAF, HM-7 & LAH-20.**

INPUT 1 [A] : Connect to [A] terminal of Paging adaptor: PB-1, PG-U, PA-1 or PA-2.

[E1] : Connect to [GND] terminal of PB-1, PG-U, or [G] terminal of PA-1 or PA-2.

INPUT 2 [C] : Connect to [No.] terminal assigned of LAF-, HM-7 or (YELLOW) wire of LAN-1 in LAH-20 system.

[E2] : Connect to [E] terminal of LAF-, HM-7 or (BLUE) wire of LAN-1 in LAH-20 system.

OUTPUT [8Ω] : Connect to 8 ohm paging speaker.

[2Ω] : Connect to 8 ohm paging speaker, but ONLY WHEN installing multiple number of speakers (ex. Up to four 8 ohm paging speakers).

[COM] : Connect to paging speaker.

[+] : Connect to [+] terminal of PS-12A (or PS-12C) power supply.

[–] : Connect to [–] terminal of PS-12A (or PS-12C) power supply.

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FEATURES

* Allows paging announcement to relatively small room or area (where only one paging speaker is installed) in conjunction with Aiphone paging adaptors in TB-F, TB-H & KAH systems.
* Allows paging announcement to relatively small room or area (where only one paging speaker is installed) amplifying the output of LAF, HM-7 and LAH-20 (in conjunction with LAN-1).
  Talkback paging is not available in LAF, HM-7 or LAH-20 systems.

INSTALLATION

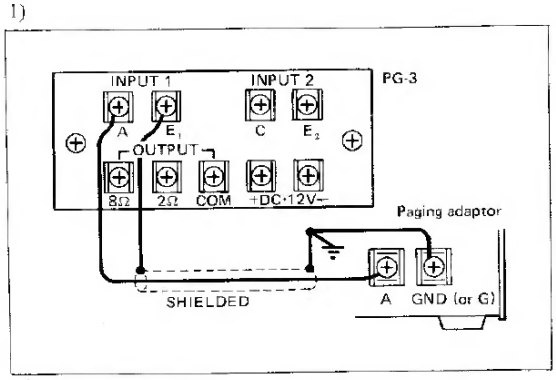
Do not attempt to install PG-3 until you have read and thoroughly understood the installation procedure. Aiphone's warranty is void if it is installed in a manner other than described in this manual.

WIRING

1) Amplifier input connections;

The paging adaptor and PG-3 (INPUT 1 [A], [E1] terminals) should be located as close as possible to each other. SHIELDED CABLE SHOULD BE ALWAYS USED TO CONNECT THEM IN ORDER TO REDUCE THE POSSIBILITY OF PICKING UP R.F. SIGNALS OR ELECTRICAL NOISE.

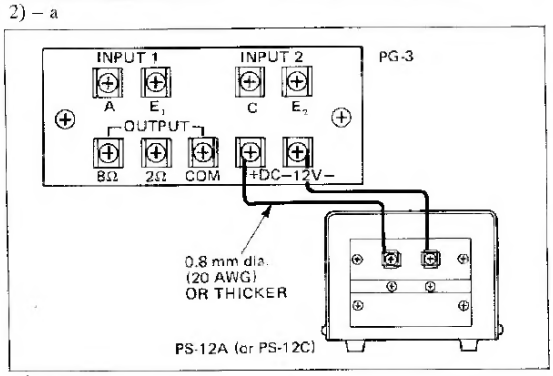
1)



2) Power supply connections;

a. PS-12A (or PS-12C) power supply and PG-3 should be located as close as possible to each other and 0.8 mm dia. wires (20 AWG) or thicker should be used in order to avoid drop of PG-3 output power.

2) – a

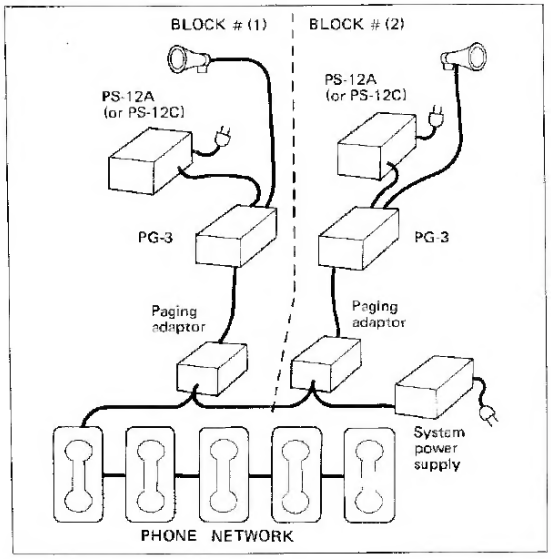


b. LAF, HM-7, TB-F, TB-H & TS-K systems (TB-H: up to 12 phones);
One PS-12A (or PS-12C) power supply may be COMMONLY used for both intercom system and PG-3.

c. KAH, LAH-20 & TB-H systems (TB-H: more than 12 phones);
One PS-12A (or PS-12C) power supply is required for the intercom system and a second power supply is required for the PG-3.

NOTE: When two or more PG-3 are installed in a system, one PS-12A (or PS-12C) power supply MUST be used for each PG-3.

2) NOTE



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3) Paging speaker line connections;

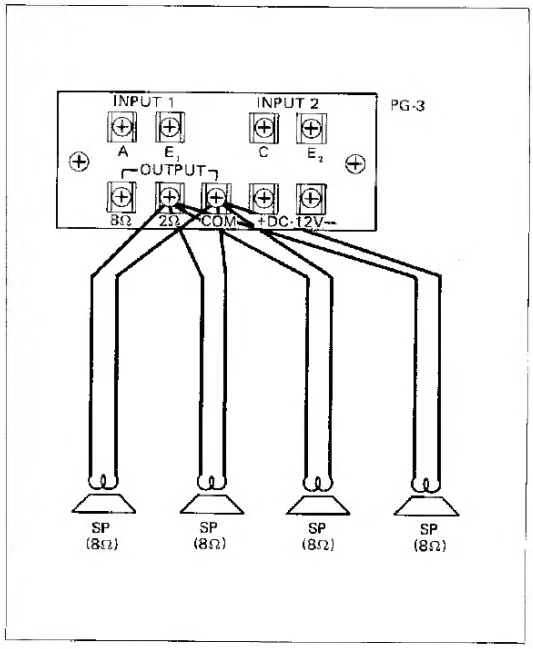
a. Heaviest possible gauge of wires should be run from PG-3 to paging speaker.
Refer to the chart below and select the proper wire gauge to meet your requirements.

AWG size	22 AWG	20 AWG	18 AWG
Distance	160′	235′	355′

Diameter	0.65 mm	0.8 mm	1.0 mm
Distance	40 m	60 m	90 m

b. When paging speakers are installed in multiple (Up to four 8 ohm paging speakers are installable), run 2 separate wires from PG-3's [2Ω] and [COM] terminals to each 8 ohm paging speaker.

3) – b



ADAPTOR REQUIREMENTS

PG-3 can add the feature of paging to relatively small area, where one 8 ohm paging speaker is installed. The following requirements MUST be met for paging adaptor and power supply.

SYSTEM	STRAIGHT PAGING	TALKBACK PAGING	POWER SUPPLY FOR PG-3
TB-F	Use PG-3 with PB-1.	Use PG-3 with PB-1 and PB-2.	Supplied by system's single power supply (in a system of up to 12 phones).
TB-H	Use PG-3 with PB-1 for each block.	Use PG-3 with PB-1 and PB-2 for each block.	Supplied by system's single power supply (in a system of up to 12 phones).
TS-K	Use PG-3 with PG-U for each block.	Use PG-3 with PG-U and PA-B for each block.	Supplied by system's single power supply (in a system of up to 12 phones).
KAH	Use PG-3 with PA-1 for each block.	Use PG-3 with PA-2 for each block.	Separate power supply required for PG-3 and system itself.
LAF	Connect PG-3 directly to LAF stations.	Not available.	Supplied by system's single power supply.
LAH-20	Use PG-3 with LAN-1.	Not available.	Separate power supply for PG-3 and system itself.
HM-7	Connect PG-3 directly to HM-7 stations.	Not available.	Supplied by system's single power supply.

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AJUSTING CONTROLS

[1] When using PG-3 in conjunction with paging adaptor in systems: TB-F, TB-H, KAH & TS-K;

1. After wiring, set paging adaptor TREBLE, BASS & VOLUME controls (and, of background music source, if installed) and PG-3 VOLUME control at MIDPOINT.
2. Turn on the power supply and background music source (and power supply for PG-3, if installed separately) and proceed with adjustments in the following manner;
   (1) Test operations for paging and talkback paging, as described in the manual.
   (2) During paging, adjust paging adaptor TREBLE, BASS & VOLUME controls to desired level. In case paging volume level is too low after paging adaptor VOLUME control is set at maximum level, adjust PG-3 VOLUME control to achieve the most desired level.
   (3) If background music is included, adjust paging adaptor MUSIC TREBLE, BASS & VOLUME controls (or in background music source, if included) while listening to the background music.
   (4) Adjust PRE-TONE VOLUME control on paging adaptor (PB-1 only).

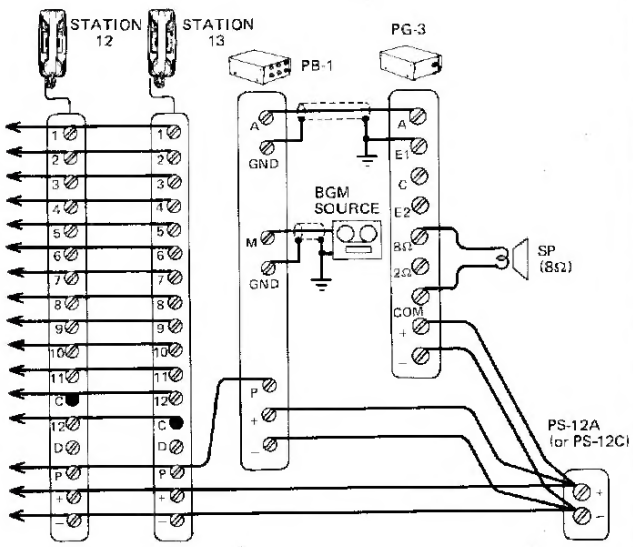
[2] When using PG-3 in system: LAF, HM-7 & LAH;

1. After wiring, turn on the power supply (and power supply for PG-3, if installed). Set PG-3 VOLUME control at MIDPOINT.
   (1) Test operations for calling and communication, as described in the manual.
   (2) Adjust master station VOLUME controls for calling and communication (LAW-1 VOLUME controls in LAH-20 system) to desired level.
   (3) On master station, select the number button assigned for paging (to which PG-3 [C] terminal is connected) and page. Adjust PG-3 VOLUME control to desired level, while listening to the announcement from the paging speaker.

INSTALLATION EXAMPLES

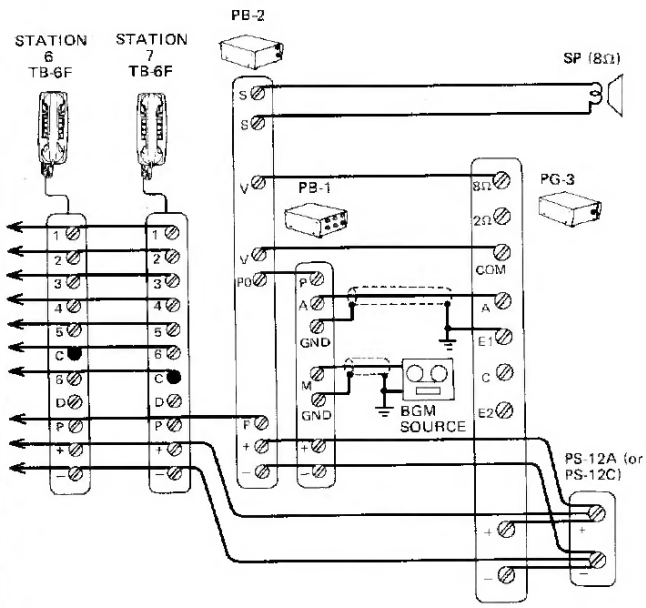
[1] TB-F system

(1) Straight paging



NOTES: (1) One power supply may be used commonly, but [+], [−] lines should be run separately from PG-3, PB-1 & TB-F phones.
(2) Depressing [P] button in handset operates paging speaker.

(2) Paging with talkback



NOTES: (1) One power supply may be used commonly, but [+], [−] lines should be run separately from PG-3, PB-1/PB-2 & TB-F phones.
(2) Depressing [P] button in handset operates paging speaker and releasing for talkback.

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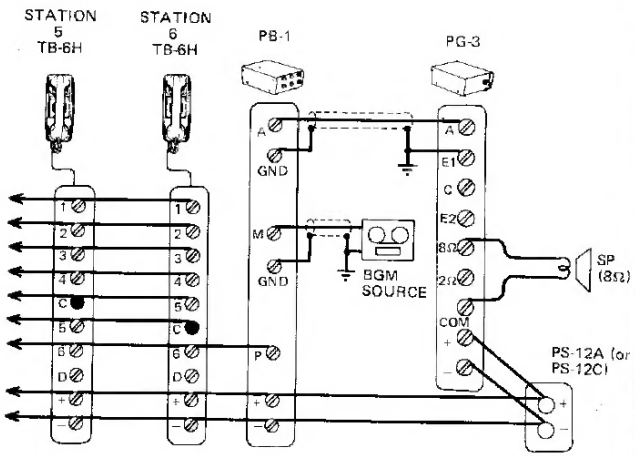
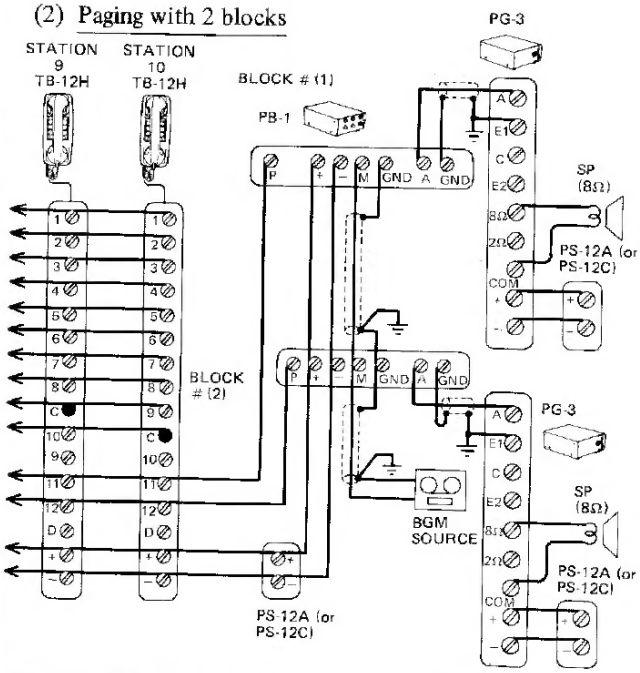
2 TB-H system

(1) Straight paging



NOTES: (1) One power supply may be used commonly, but [+], [−] lines should be run separately from PG-3 and PB-1/TB-H phones.
(2) The selector button #6 on each TB-H phone operates paging speaker.

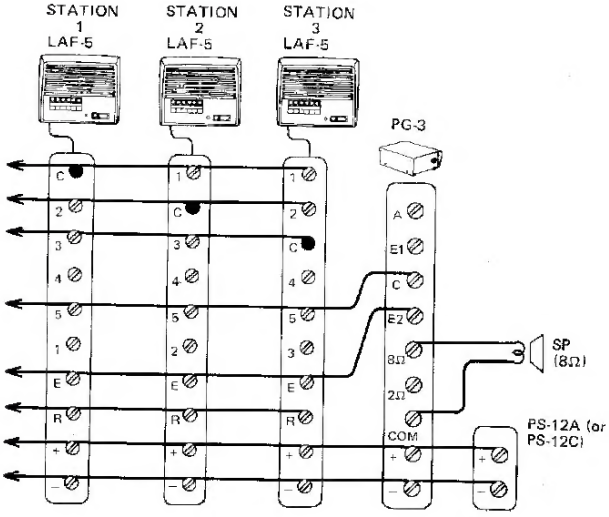
(2) Paging with 2 blocks



NOTES: (1) One power supply is required for the intercom system and a second power supply is required for the PG-3 amplifier of each block.
(2) The selector button #11 on each TB-H phone operates paging speaker of block #1 and #12 block 2.

3 LAF system

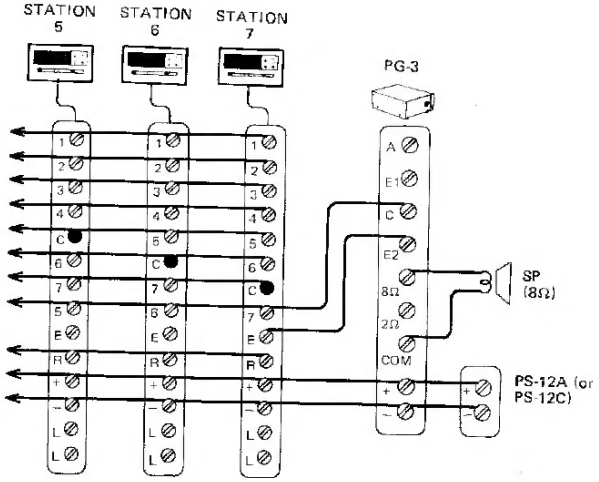
* Straight paging



NOTES: (1) PG-3 may be powered by power supply of LAF system.
(2) The selector button #5 on each LAF station operates paging speaker.

4 HM-7 system

* Straight paging



NOTES: (1) PG-3 may be powered by power supply of HM-7 system.
(2) The selector button #5, 6 or 7 on HM-7 station #5, 6 or 7 operates paging speaker.

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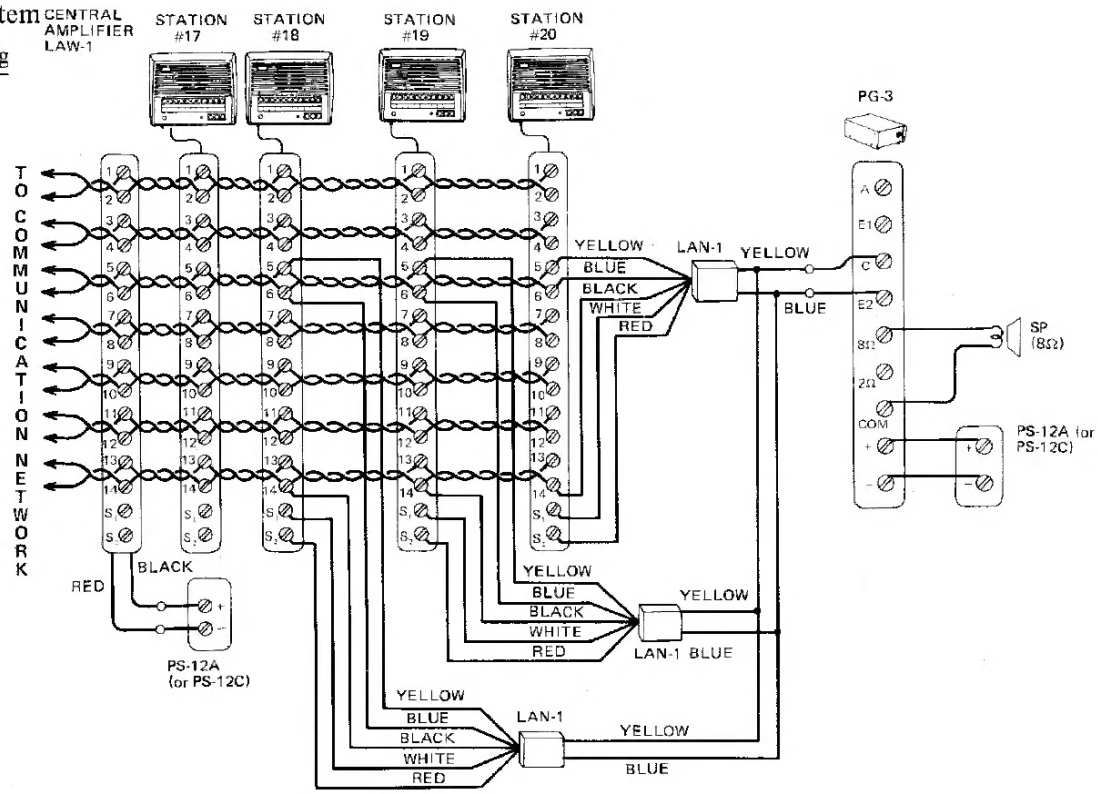
INSTALLATION EXAMPLES (continued)

5 LAH-20 system

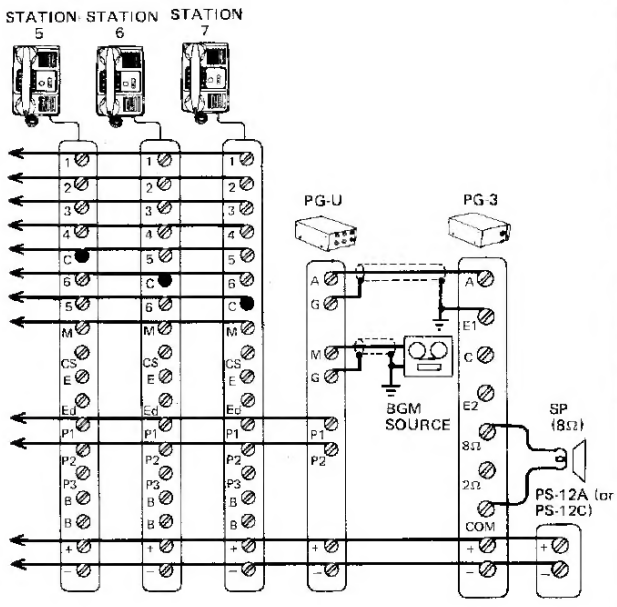
* Straight paging



NOTES: (1) One power supply is required for the intercom system and a second power supply is required for the PG-3.
(2) Selecting own station number buttons; i.e., #8-A on station #18, #9-A on station #19 and #10-A on station #20 operates paging speaker.

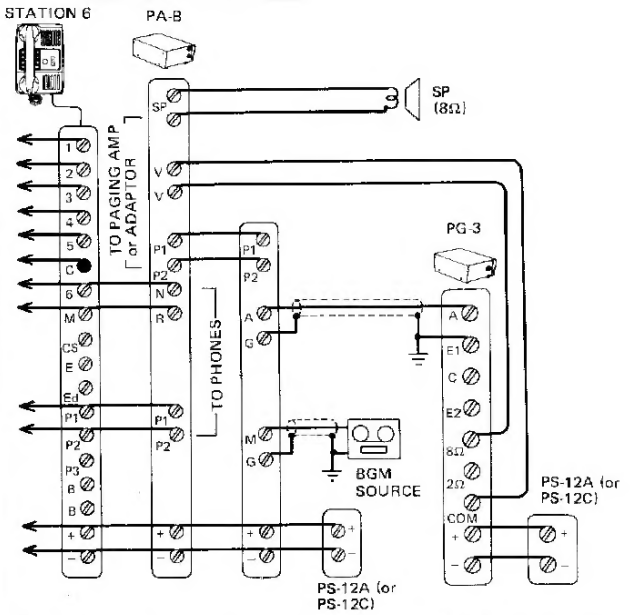
6 TS-K system

(1) Straight paging



NOTES: (1) PG-3 may be powered by power supply of TS-K system.
(2) Depressing P button on each TS-K phone operates paging speaker.

(2) Paging with talkback



NOTES: (1) One power supply is required for the intercom system and a second power supply is required for the PG-3.
(2) Depressing selector button #6 and P button operates paging speaker and releasing for talkback on each TS-K phone.

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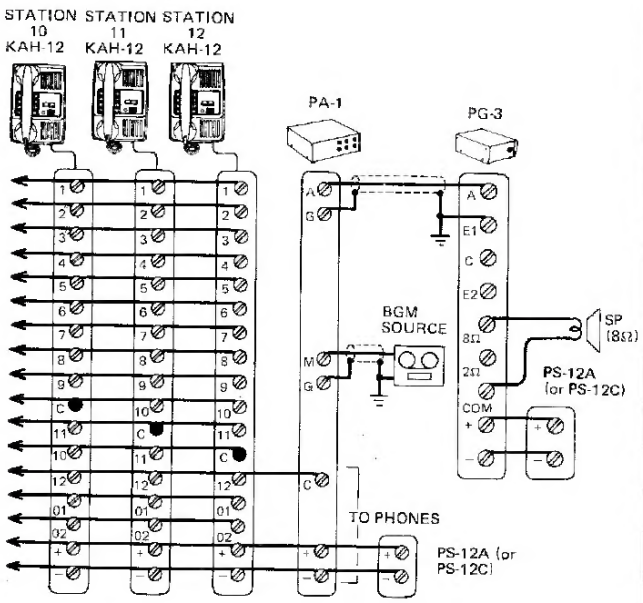
INSTALLATION EXAMPLES (continued)

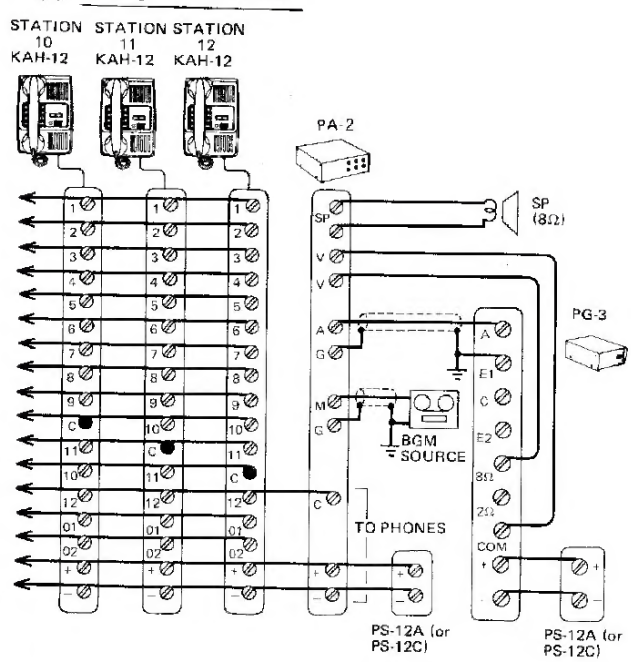
7 KAH system

(1) Straight paging



NOTES: (1) One power supply is required for the intercom system and a second power supply is required for the PG-3.
(2) The selector button #12 on each KAH phone operates paging speaker.

(2) Paging with talkback



NOTES: (1) One power supply is required for the intercom system and a second power supply is required for the PG-3.
(2) Depressing selector button #12 and [P] button operates paging speaker and releasing for talkback on each KAH phone.

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We at AIPHONE are proud of our products. Our designers and engineers strive to bring you the finest in communication equipment. Each item has been carefully tested and inspected before leaving our factory. Properly installed and used, your Aiphone intercom system should give years of trouble-free service.

We are pleased to offer the following warranty:

WARRANTY

Aiphone warrants its products to be free from detects ot material and workmanship under normal use and service for a period of one year after delivery to the ultimate user and will repair free of charge or replace at no charge, should it become defective upon which examination shall disclose to be defective and under warranty. Aiphone reserves unto itself the sole right to make the final decision whether there is a defect in materials and/or workmanship; and whether or not the product is within the warranty.

This warranty shall not apply to any Aiphone product which has been subject to misuse, neglect, accident, or to use in violation of instructions furnished, nor extended to units which have been repaired or altered outside of the factory

This warranty does not cover batteries or damage caused by batteries used in connection with the product.

This warranty covers bench repairs only, and any repairs must be made at the shop or place designated in writing by Aiphone. Aiphone will not be responsible for any costs incurred involving on site service calls.

Aiphone Co., Ltd., Nagoya, Japan
Aiphone Corporation, Bellevue, Washington
PG–3I

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